

Serial No. 09/745,120
August 19, 2002
Page 2

**a plurality of surface-mounting terminals mounted on said insulative case;
at least one notch provided in and extending entirely through said insulative case in a thickness direction from a top surface to a bottom surface thereof to accommodate a lead portion of at least one of said plurality of surface-mounting terminals; and
said notch providing a clearance between said insulative case and said lead portion of said at least one of said plurality of surface-mounting terminals to prevent the occurrence of capillary effect of solder applied to said electronic component.” (Emphasis added)**

Claim 12 recites features that are similar to claim 1, including the emphasized features.

The Examiner alleged that Kruppa et al. teaches an electronic component including all of the features recited in claim 1, including a plurality of surface-mounting terminals (16), at least one notch in an insulative case (30) to accommodate a lead portion of at least one of the surface-mounting terminals (16), and “said notch defining a clearance between the solder fillet portion of (11, 12) and the insulative case”. Applicants respectfully disagree.

In contrast to the present claimed invention and the Examiner’s allegation, Kruppa et al. teaches a single connector 10 including a vertical cylindrical portion 16 which extends through a hole 32 in the substrate 30. Since the vertical cylindrical portion 16 of Kruppa et al. extends through the substrate 30 and is NOT mounted on the surface of the substrate 30, this element clearly cannot be fairly construed as a surface-mounting terminal as recited in claim 1. Additionally, the Examiner has failed to specify which element of Kruppa et al. teaches “a lead portion of at least one of the surface-mounting terminals”. In fact, Kruppa et al. clearly fails to teach or suggest any lead portion, and certainly fails to teach or suggest any notch “to accommodate a lead portion of at least one of said plurality of surface-mounting terminals” as recited in the present claimed invention.

Furthermore, since, at best, Kruppa et al teaches only a single connector 10, Kruppa et al. clearly fails to teach or suggest “a plurality of surface-mounting terminals” as recited in the present claimed invention.

Serial No. 09/745,120
August 19, 2002
Page 3

In addition, the Examiner alleged that element 30 of Kruppa et al. is a case member, however, as indicated above, element 30 of Kruppa et al. is merely disclosed as a "substrate", **NOT** a case. Thus, Applicants respectfully submit that the substrate 30 of Kruppa et al. cannot be fairly construed as "an insulative case" as recited in the present claimed invention.

The Examiner alleged that the hole of Kruppa et al. into which the vertical cylindrical 16 extends is "a notch". However, a "notch" is defined as "an angular cut, indentation or hollow in an object, surface, or edge". Webster's Encyclopedic Unabridged Dictionary of the English Language. Applicants enclose a copy of page 986 of this dictionary which includes the definition of "notch". Accordingly, Applicants respectfully submit that the hole of Kruppa et al. cannot be fairly construed as "a notch" as recited in the present claimed invention.

And further, the Examiner appears to have ignored the recitation of "to prevent the occurrence of capillary effect of solder applied to said electronic component" as recited in claim 1 of the present application. Kruppa et al. fails to teach or suggest anything about the capillary effect of the solder 60, and certainly fails to teach or suggest "said notch providing a clearance between said insulative case and said lead portion of said at least one of said plurality of surface-mounting terminals to prevent the occurrence of capillary effect of solder applied to said electronic component" as recited in the present claimed invention.

Accordingly, Applicants respectfully submit that Kruppa et al. fails to teach or suggest the unique combination and arrangement of elements recited in claim 1 of the present application.

The Examiner further alleged that Kuriyama et al. teaches all of the features recited in claims 1 and 12 of the present application except for the notch "extending entirely through said insulative case in a thickness direction from a top surface to a bottom surface thereof". However, the Examiner alleged that "to extend the notch entirely through the insulative case would have been an obvious matter of design lacking criticality, since the function performed by the notch is the same." Applicants respectfully disagree.

Serial No. 09/745,120
August 19, 2002
Page 4

As clearly seen in Fig. 1 of Kuriyama et al., although the notch on the bottom of case 2 provides some clearance on the sides of connection ends 11, 12, there is absolutely no clearance between the case element 2 and the vertical portions of the fixed and movable terminals 4, 5, as clearly seen in Fig. 1, and, in fact, the vertical portions of the fixed and movable terminals 4, 5 are in contact with the case 2. Thus, contrary to the Examiner's allegation, the notch on the bottom surface of the case element 2a would **NOT** "prevent the occurrence of capillary effect of solder applied to said electronic component" because capillary effect would occur between the vertical portions of the fixed and movable terminals 4, 5 and the case 2 since the vertical portions of the fixed and movable terminals 4, 5 and the case 2 are clearly in contact with one another.

Therefore, contrary to the Examiner's allegation, the arrangement and function performed by the notch of Kuriyama et al. are clearly **NOT** the same as the notch "extending entirely through said insulative case in a thickness direction from a top surface to a bottom surface thereof" as recited in claim 1 of the present application. Since the notch of Kuriyama et al. clearly fails to perform the same function as the notch of the present claimed invention, Applicants respectfully submit that it would not have been a matter of design choice to modify the notch of Kuriyama et al. to extend entirely through the insulative case in a thickness direction. The Examiner must provide specific reasoning to support an assertion of design choice. In re Chu, 66 F.3d 292 (Fed. Cir. 1995). Clearly the Examiner has failed to provide any specific valid reasoning to support the assertion of design choice.

Accordingly, Applicants respectfully submit that Kuriyama fails to teach or suggest the unique combination and arrangement of elements recited in claims 1 and 12 of the present invention.

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1 and 12 are allowable. Claims 2-11 and 13-20 depend upon claims 1 and 12, respectively, and are therefore allowable for at least the reasons that claims 1 and 12 are allowable.

In view of the foregoing Remarks, Applicants respectfully submit that this